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L4: Entry 348 of 362

File: USPT

May 5, 1987

US-PAT-NO: 4663160

DOCUMENT-IDENTIFIER: US 4663160 A

TITLE: Vaccines for gram-negative bacteria

DATE-ISSUED: May 5, 1987

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tsay; Grace C.	Moraga	CA	N/A	N/A
Collins; Michael S.	Richmond	CA	N/A	N/A

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE	CODE
Miles Laboratories, Inc.	Elkhart	IN	N/A	N/A	02	

APPL-NO: 6/ 475415

DATE FILED: March 14, 1983

INT-CL: [4] A61K 39/40, A61K 39/104, A61K 39/02

US-CL-ISSUED: 424/87; 424/92, 424/85, 424/88

US-CL-CURRENT: 424/170.1; 424/164.1, 424/234.1, 424/259.1, 424/260.1, 424/802

FIELD-OF-SEARCH: 424/88, 424/92, 424/85-87

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

☐ Search Selected☐ Search ALL

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> <u>3987164</u>	October 1976	Homma et al.	424/92
<input type="checkbox"/> <u>4083959</u>	April 1978	Homma et al.	424/92
<input type="checkbox"/> <u>4110432</u>	August 1978	Wilkinson et al.	424/88
<input type="checkbox"/> <u>4157389</u>	June 1979	Homma et al.	424/92
<input type="checkbox"/> <u>4185090</u>	January 1980	McIntire	424/92
<input type="checkbox"/> <u>4285936</u>	September 1981	Pier et.al.	424/92
<input type="checkbox"/> <u>4356170</u>	October 1982	Jennings et al.	424/92
<input type="checkbox"/> <u>4372883</u>	February 1983	Matuhashi et al.	424/92

OTHER PUBLICATIONS

Jennings, H. et al., J. Immunology, vol. 127, pp. 1211-1218, 1981.
Schneerson, R. et al., J. Experimental Medicine, vol. 132, pp. 361-376, 1980.
Chemical Abstracts, vol. 94, Abstract No. 145220x, 1981.

ART-UNIT: 127

PRIMARY-EXAMINER: Hazel; Blondel

ATTY-AGENT-FIRM: Johnson; Lester E. Simonton; Pamela A.

ABSTRACT:

An immunizing composition is disclosed and comprises a detoxified polysaccharide from a gram-negative bacterium covalently coupled to a detoxified protein from said gram-negative bacterium by means of a 4-12 carbon moiety. To prepare the above immunizing agent, the lipid A portion of lipopolysaccharide from a gram-negative bacterium is separated to give a detoxified polysaccharide. Reactive aldehyde groups are generated on the detoxified polysaccharide by selective oxidation. The detoxified polysaccharide is then covalently coupled to a detoxified protein from said gram-negative bacterium by means of a 4-12 carbon moiety having functionalities reactive to the aldehyde groups on the detoxified polysaccharide and to the carboxylic groups on the detoxified protein.

16 Claims, 0 Drawing figures

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L4: Entry 357 of 362

File: USPT

Aug 25, 1981

US-PAT-NO: 4285936

DOCUMENT-IDENTIFIER: US 4285936 A

TITLE: Method for producing a vaccine against bacterial
infections caused by pseudomonas aeruginosa

DATE-ISSUED: August 25, 1981

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pier; Gerald B.	Brookline	MA	N/A	N/A
Sadoff; Jerald C.	Washington	DC	N/A	N/A

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE	CODE
The United States of America as represented by the Secretary of the Army	Washington	DC	N/A	N/A		06

APPL-NO: 6/ 101620

DATE FILED: December 10, 1979

INT-CL: [3] A61K 31/70, C08B 37/00, A61K 39/104

US-CL-ISSUED: 424/180; 424/88, 424/92, 536/1

US-CL-CURRENT: 424/260.1; 514/54, 514/885, 536/123

FIELD-OF-SEARCH: 424/92, 424/88, 424/180, 536/1

PRIOR-ART-DISCLOSED:

OTHER PUBLICATIONS

Pier, G., et al., Injection and Immunity, vol. 22, pp. 908-925,
1978.

ART-UNIT: 125

PRIMARY-EXAMINER: Brown; Johnnie R.

ASSISTANT-EXAMINER: Hazel; Blondel

ATTY-AGENT-FIRM: Gapcynski; William G. Bellamy; Werten F. W.
Winters; Sherman D.

ABSTRACT:

A method for isolating a non toxic, high molecular weight

polysaccharide igen from the crude slime of a *Pseudomonas aeruginosa* culture, and a method for inducing immunity in a host to said live organisms is described. The slime is initially prepared for the isolation procedure by separating the bacterial cells from the slime and dissolving the slime in a phosphate buffer solution. Dissolved contaminating nucleic acids are then precipitated and separated from solution. A lipid A portion of the contaminating lipopolysaccharide constituent is then removed and precipitated by acetic acid hydrolysis, and the remaining lipids present are extracted with chloroform. Nearly all of the residual nucleic acids are then removed by digestion with nucleases, and the remaining protein extracted with phenol. The aqueous and phenol layers are then separated, and the aqueous layer applied to a gel filter to isolate the antigen by column chromatography. The antigen appears in the void volume. A vaccine containing the polysaccharide antigen of this invention has been successfully tested and found to be non toxic and highly effective in inducing an immune response to the organism in a host.

5 Claims, 0 Drawing figures

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L4: Entry 331 of 362

File: USPT

Sep 3, 1991

US-PAT-NO: 5045456

DOCUMENT-IDENTIFIER: US 5045456 A

TITLE: Process for removing bacterial endotoxin from
gram-negative polysaccharides

DATE-ISSUED: September 3, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rienstra; Mark S.	Lansdale	PA	N/A	N/A
Scattergood; Edgar M.	Lansdale	PA	N/A	N/A

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Merck & Co., Inc.	Rahway NJ		N/A	N/A	02

APPL-NO: 7/ 595722

DATE FILED: October 9, 1990

PARENT-CASE:

This is a continuation of application Ser. No. 364,927, filed
June 12, 1989, now abandoned.

INT-CL: [5] C12P 19/04, C12P 1/04, C12R 1/21

US-CL-ISSUED: 435/101; 210/601, 210/616, 210/631, 424/88,
424/92, 435/170, 435/262, 435/280, 435/800, 435/803, 435/851 ,
536/1.1US-CL-CURRENT: 435/101; 210/601, 210/616, 210/631, 424/197.11,
424/234.1, 424/256.1, 424/831, 435/170, 435/262, 435/280 ,
435/800, 435/803, 435/851, 536/123.1FIELD-OF-SEARCH: 435/101, 435/170, 435/262, 435/280, 435/800,
435/803, 536/1.1, 210/601, 210/616, 210/631, 424/88, 424/92

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

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PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> <u>4196192</u>	April 1980	Kuo	424/92
<input type="checkbox"/> <u>4220717</u>	September 1980	Kuo	435/101
<input type="checkbox"/> <u>4474758</u>	October 1984	Kuo et al.	424/88
<input type="checkbox"/> <u>4695624</u>	September 1987	Marburg et al.	424/92

OTHER PUBLICATIONS

Sweadner et al., App. Environ. Micro. 34: 382-385 (1977).
Sands and Chun, J. Biol. Chem. 255: 1221-1226 (1980).
McIntire, et al., Biochem. 8: 4063-4066 (1969).
Ribi et al., J. Bact. 92: 1493-1509 (1966).
Feldstine et al., J. Parenter. Drug Assoc. 33: 125-131 (1979).
Berman et al., J. Parenter. Sci. Technol. 41: 158-163 (1987).
Henderson and Beans, Kidney Internatl. 14: 522-525 (1978).
Nelsen, Pharm. Technol. 2: 46-80 (1978).
Gerba et al., Pharm. Technol. 4: 83-89 (1980).
Hou et al., App. Environ. Micro. 40: 892-896 (1980).
Robinson et al., Parneternal Drug Assoc. Philadelphi, pp. 54-69 (1985).
Berger et al., Adv. Chem. Ser. 16: 168-197 (1956).
Gemmell et al., Pharm. J. 154: 126 (1945).
Brindle and Rigby, Pharm. J. 157: 85-86 (1946).
Sawada et al., Appl. Environl. Micro. 51: 813-820 (1986).
Gerba et al., Appl. Environl. Micro. 50: 1375-1377 (1985).
Nolan et al., Proc. Soc. Exptl. Biol. Med. 149: 766-770 (1975).

ART-UNIT: 188

PRIMARY-EXAMINER: Lilling; Herbert J.

ATTY-AGENT-FIRM: Pfeiffer; Hesna J. Parr; Richard S.

ABSTRACT:

A process for removing endotoxin from Gram-negative polysaccharides such as H. influenzae polyribosylribitol phosphate by adding alcohol incrementally until substantially all lipopolysaccharide precipitates.

5 Claims, 3 Drawing figures

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L4: Entry 301 of 362

File: USPT

Dec 6, 1994

US-PAT-NO: 5370872

DOCUMENT-IDENTIFIER: US 5370872 A

TITLE: Escherichia coliO-polysaccharide-protein conjugate vaccine

DATE-ISSUED: December 6, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cryz; Stanley J.	Bolligen	N/A	N/A	CHX
Furer; Emil P.	Muri	N/A	N/A	CHX

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE	CODE
Swiss Serum and Vaccine Institute Berne	Berne	N/A	N/A	CHX		03

APPL-NO: 7/ 743787

DATE FILED: August 12, 1991.

INT-CL: [5] A61K 39/116, A61K 39/385, C07K 17/10

US-CL-ISSUED: 424/194.1; 424/197.11, 424/257.1, 530/395, 530/404, 530/405, 530/406, 530/411

US-CL-CURRENT: 424/194.1; 424/197.11, 424/257.1, 530/395, 530/404, 530/405, 530/406, 530/411

FIELD-OF-SEARCH: 530/395, 530/405, 530/406, 530/404, 530/807, 530/411, 424/88, 424/92, 424/87

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

☐ Search Selected☐ Search ALL

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> <u>4619828</u>	October 1986	Gordon	424/92
<input type="checkbox"/> <u>4695624</u>	September 1987	Marburg et al.	530/395
<input type="checkbox"/> <u>4711779</u>	December 1987	Porro et al.	424/92
<input type="checkbox"/> <u>4771127</u>	September 1988	Cryz et al.	530/395
<input type="checkbox"/> <u>4918163</u>	April 1990	Young et al.	424/87
<input type="checkbox"/> <u>5034516</u>	July 1991	Roy et al.	536/4.1

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
9013660	November 1990	WOX	

OTHER PUBLICATIONS

Cryz, Jr. et al. (1986) Infect Immunity 52(1):161-165.
Cryz, Jr. et al. (1990, Feb.) Infect Immunity 58(2)373-377.
Cryz, Jr. et al. (1991, May) JID 163(5): 1040-1045.
Jennings et al. (1984) Infect Immun. 43(1):407-412.
Fay et al. (1984) Infect Immunity 45(1):217-221.
Grandsden et al., "Bacteremia Due to Escherichia coli:A Study of 861 Episodes", Reviews of Infectious Diseases 12(6):1008-1018 (1990).
Cross et al., "The Importance of the K1 Capsule in Invasive Infections Causes by Escherichia coli", The Journal of Infectious Diseases 149(2):184-193 (1984).

ART-UNIT: 183

PRIMARY-EXAMINER: Kim; Kay K. A.

ATTY-AGENT-FIRM: Kile; Bradford E. O'Brien; Kevin M. Cordell; Ruffin B.

ABSTRACT:

The present invention relates to a method of producing an E. coli vaccine and to the vaccine produced thereby. The method involves purifying lipopolysaccharide from E. coli expressing complete O-polysaccharide sidechains; isolating the O-polysaccharide region of the lipopolysaccharide molecule by hydrolysis in dilute acetic acid and purifying it essentially free of lipid A; and covalently coupling lipid A-free O-polysaccharide via at least one hydroxyl or carboxyl group of the polysaccharide to a carrier protein. Polyvalent vaccines are prepared by combining two or more monovalent vaccines for different serotypes prepared according to the present invention. The present also relates to conjugates used in the vaccines. The conjugates of the present invention are the O-polysaccharide region of an E. coli lipopolysaccharide molecule covalently coupled to a carrier protein.

7 Claims, 0 Drawing figures

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Search Results - Record(s) 1 through 4 of 4 returned.

☐ 1. Document ID: US 6043067 A

L2: Entry 1 of 4

File: USPT

Mar 28, 2000

US-PAT-NO: 6043067

DOCUMENT-IDENTIFIER: US 6043067 A

TITLE: Distributing liquid in a fluid bed reactor into
turbulent and non-turbulent zones

DATE-ISSUED: March 28, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP	CODE	COUNTRY
Lihme; Allan Otto Fog	Birker.o slashed.d	N/A	N/A		DKX
Nielsen; Claus Schafer	Humleb.ae butted.k	N/A	N/A		DKX
B.o slashed.g-Hansen; Thorkild Christian	Hellerup	N/A	N/A		DKX

US-CL-CURRENT: 435/174; 210/601, 210/632, 210/656, 210/661,
435/176, 435/178, 435/180, 435/289.1, 435/815, 436/526,
436/527, 436/529, 436/531, 530/412, 530/413, 530/811, 530/812,
530/813

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
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☐ 2. Document ID: US 5935442 A

L2: Entry 2 of 4

File: USPT

Aug 10, 1999

US-PAT-NO: 5935442

DOCUMENT-IDENTIFIER: US 5935442 A

TITLE: Liquid fluid bed chromatography using conglomerates of controlled density

DATE-ISSUED: August 10, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP	CODE	COUNTRY
Lihme; Allan Otto Fog	Birker.o slashed.d	N/A	N/A		DKX
Nielsen; Claus Schafer	Humleb.ae butted.k	N/A	N/A		DKX
B.o slashed.g-Hansen; Thorkild Christian	Hellerup	N/A	N/A		DKX

US-CL-CURRENT: 210/656; 210/661, 23/313R, 422/70

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw Desc	Image
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☐ 3. Document ID: US 5866006 A

L2: Entry 3 of 4

File: USPT

Feb 2, 1999

US-PAT-NO: 5866006

DOCUMENT-IDENTIFIER: US 5866006 A

TITLE: Coated single particles and their use in fluid bed chromatography

DATE-ISSUED: February 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP	CODE	COUNTRY
Lihme; Allan Otto Fog	Birker.o slashed.d	N/A	N/A		DKX
Nielsen; Claus Schafer	Humleb.ae butted.k	N/A	N/A		DKX
B.o slashed.g Hansen; Thorkild Christian	Hellerup	N/A	N/A		DKX

US-CL-CURRENT: 210/635; 210/198.2, 210/656

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw Desc	Image
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☐ 4. Document ID: US 5618622 A

L2: Entry 4 of 4

File: USPT

Apr 8, 1997

US-PAT-NO: 5618622

DOCUMENT-IDENTIFIER: US 5618622 A

TITLE: Surface-modified fibrous material as a filtration medium

DATE-ISSUED: April 8, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP	CODE	COUNTRY
Gillberg-Laforce; Gunilla E.	Roswell	GA	N/A		N/A
Turkevich; Leonid A.	Alpharetta	GA	N/A		N/A
Kiick-Fischer; Kristi L.	Alpharetta	GA	N/A		N/A

US-CL-CURRENT: 428/357; 210/502.1, 210/505, 210/507, 210/509,
210/639, 210/679, 210/777, 428/221, 428/375, 442/164

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC	Draw Desc	Image
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Terms	Documents
polysaccharide and deep adj bed adj filter	4

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Documents, starting with Document:

4

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